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09/846,991	05/01/2001	Hiroshi Shibata	2271/64858	3907

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Ivan S. Kavrukov
COOPER & DUNHAM LLP
1185 Avenue of the Americas
New York, NY 10036

EXAMINER

SHINGLES, KRISTIE D

ART UNIT	PAPER NUMBER
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2141

MAIL DATE	DELIVERY MODE
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11/01/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/846,991

Applicant(s)

SHIBATA, HIROSHI

Examiner

Kristie D. Shingles

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-46 and 49-52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-46 and 49-52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date. _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Per Applicant's Request for Continued Examination

Claims 1, 5, 9, 11, 12, 15, 20, 23, 28, 31, 35, 49, 51 and 52 have been amended.

Claims 47-48 are cancelled.

Claims 1-46 and 49-52 are pending.

Continued Examination Under 37 CFR 1.114

I. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/13/2007 has been entered.

Response to Arguments

II. Applicant's arguments filed 7/3/2007 with respect to claims 1, 5, 9, 12, 15, 20, 23, 28, 31, 35, 39 and 49 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

III. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

IV. Claims 1-46 and 49-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Sampath et al* (US 6,665,425) in view of *Hockey et al* (US 6,181,886) in further view of *Smith et al* (US 6,785,015).

a. Per claim 1, *Sampath et al* teach a communications terminal apparatus, comprising:

- a communications system configured to perform electronic communications with a manager supervising said apparatus (*Abstract and col.7 line 57-col.8 line 20*);
- a register registering electronic communications addresses of said manager and said service depot, identification of said apparatus, specification of said consumable product, and identification of said service depot (*col.1 line 61-col.2 line 58, col.3 line 53-col.4 line 10, and col.7 line 50-col.8 line 51*); and
- a controller configured to send a request for supplying said consumable product to said manager using said electronic communications address when said detector detects that said consumable product is nearly ended (*Abstract, col.4 line 11-col.5 line 8, col.6 lines 15-50 and col.7 line 50-col.8 line 51*).

Sampath et al teach automatically identifying image quality problems in document processing systems, the automatic scheduling of service, parts and/or consumables and automated remediation of faults (*col.1 lines 39-60*) along with the collection of relevant machine data initiating diagnostic routines (*col.3 line 53-col.4 line 10, col.7 lines 3-21, col.8 lines 1-11*) and repair verification (*Abstract, col.5 lines 1-6, col.7 lines 63-67*). Yet *Sampath et al* fail to explicitly disclose a communications terminal apparatus supervised by a manager who contacts a service provider when servicing is required; a detector automatically detecting a status of usage of a consumable product in said apparatus and supplied by a service depot and send a report for reporting a completion of supplying said consumable product on said apparatus when said

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detector detects that said consumable product is refilled, said request including said identification of said apparatus, said specification of said consumable product, and said identification of said service depot. However, *Hockey et al* disclose automatic monitoring of the amount of consumable used in printing systems, and issuing a notification to the service person when the consumable has been refilled (*col.1 line 61-col.2 line 3, col.6 lines 49-63*); while *Smith et al* teach a system manager supervising a network peripheral and contacting a consumable and parts supplier when repair services are needed (*col.15 lines 5-30*).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Sampath et al* with *Hockey et al* and *Smith et al* for the purpose of providing automated detection capabilities in order to collect the necessary data needed for diagnosing possible machine defects or problems without manual intervention along with notification means for notifying in the case of a repair and when a repair has been has been corrected in order to prevent further service actions. Provisioning a manager that contacts a service provider when servicing of an apparatus is needed is well-known technique used in managing networked peripherals and would have been obvious to implement in order to directly communicate the necessary repairs needed to a service repair provider.

b. **Claims 5, 9, 12 and 49** contain limitations substantially equivalent to the limitations of Claim 1 and are therefore rejected under the same basis.

c. **Per claim 39**, *Sampath et al* teach a method of maintaining a system that comprises networked units that may require from time to time at least one of replenishing consumables and servicing of components, wherein said consumables or servicing are provided

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by at least one external facility and said system of networked units is supervised by a manager who need not be at the premises of said units, said method comprising:

- responding to the generation of a first detection signal at the unit to automatically generate and electronically transmit a first notification to each of (a) the manager supervising the networked units, and (b) the at least one external facility (*Abstract and col.7 line 57-col.8 line 20*);
- wherein said first notification identifies at least said unit and said event to thereby advise both the manager and the at least one facility (a) which of the networked units has a requirement and (b) what is the requirement (*col.1 line 61-col.2 line 58, col.3 line 53-col.4 line 10, and col.7 line 50-col.8 line 51*).

Sampath et al teach automatically identifying image quality problems in document processing systems, the automatic scheduling of service, parts and/or consumables and automated remediation of faults (*col.1 lines 39-60*) along with the collection of relevant machine data initiating diagnostic routines (*col.3 line 53-col.4 line 10, col.7 lines 3-21, col.8 lines 1-11*) repair verification (*Abstract, col.5 lines 1-8, col.7 lines 63-67, col.8 lines 1-45*). Yet *Sampath et al* fail to explicitly disclose automatically detecting a first event indicative of a requirement for replenishing consumables or servicing components at any one of said networked units, and generating a first detection signal in response to a detection of a first event at the unit and automatically detecting thereafter at said unit a second event indicating that the requirement has been satisfied, and generating a second detection signal in response to a detection of said second event; responding to the generation of said second detection signal to automatically generate and transmit a second notification to at least one of said manager and said at least one facility; and said second notification advising that the requirement has been met. However, *Hockey et al* disclose automatic monitoring of the amount of consumable used in printing systems, and issuing a notification to the service person when the consumable has been refilled (*col.6 lines 49-63*,

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col.7 lines 24-43); while *Smith et al* teach a system manager supervising a network peripheral and contacting a consumable and parts supplier when repair services are needed (*col.15 lines 5-30*).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Sampath et al* and *Hockey et al* with *Smith et al* for the purpose of providing automated detection capabilities in order to collect the necessary data needed for diagnosing possible machine defects or problems without manual intervention along with notification means for notifying in the case of a repair and when a repair has been has been corrected in order to prevent further service actions. Provisioning a manager that contacts a service provider when servicing of an apparatus is needed is well-known technique used in managing networked peripherals and would have been obvious to implement in order to directly communicate the necessary repairs needed to a service repair provider.

d. **Claims 15, 20, 23, 28, 31 and 35** contain limitations substantially equivalent to the limitations of Claims 1 and 39 and are therefore rejected under the same basis.

e. **Per claim 2**, *Sampath et al* and *Hockey et al* with *Smith et al* teach a communications terminal apparatus as defined in claim 1, *Sampath et al* further teach wherein said communications system performs E-mail communications with said manager (*col.1 lines 61-67 and col.7 line 57-col.8 line 20; Smith et al—col.15 lines 5-30*).

f. **Claims 6, 10, 13, 18, 26, 32, 36 and 42** contain limitations substantially equivalent to the limitation of Claim 2 and are therefore rejected under the same basis.

g. **Per claim 3**, *Sampath et al* and *Hockey et al* with *Smith et al* teach a communications terminal apparatus as defined in claim 1, *Sampath et al* further teach wherein

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said consumable product includes toner (*col.7 lines 3-23 and col.8 lines 1-51; Hockey et al—col.1 line 43-45*).

h. **Claims 11, 33 and 44** contain limitations substantially equivalent to the limitations of Claim 3 and are therefore rejected under the same basis.

i. **Per claim 4**, *Sampath et al* and *Hockey et al* with *Smith et al* teach a communications terminal apparatus as defined in claim 1, *Sampath et al* further teach wherein said communications system performs facsimile communications with said manager (*col.1 lines 40-67, col.5 lines 9-22 and col.8 lines 11-20*).

j. **Claims 8, 19, 22, 27, 30, 34, 38 and 43** contain limitations substantially equivalent to the limitations of Claim 4 and are therefore rejected under the same basis.

k. **Per claim 7**, *Sampath et al* and *Hockey et al* with *Smith et al* teach a communications terminal apparatus as defined in claim 5, *Sampath et al* further teach wherein said maintenance component includes a photoconductor (*col.5 lines 9-22*).

l. **Claims 14, 37 and 46** contain limitations substantially equivalent to the limitations of Claim 7 and are therefore rejected under the same basis.

m. **Per claim 16**, *Sampath et al* and *Hockey et al* with *Smith et al* teach a communications terminal apparatus as defined in claim 15, *Sampath et al* further teach the apparatus comprising:

- an analyzer configured to analyze E-mail including request receipt acknowledgement information notified from either said manager or said service depot with respect to said first E-mail (*col.7 lines 36-67*);
- a display displaying said request receipt acknowledgement information (*col.8 lines 1-20*),

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- wherein said mail controlling system controls said display to display said request receipt acknowledgement information analyzed by said analyzer, and controls said display to stop displaying when said consumable product is determined to be in said refilled status based on said detect information detected by said consumable product status detector (*Abstract, col.8 lines 1-51, col.10 line 65-col.11 line 13*).

n. **Claims 21, 24 and 29** contain limitations substantially equivalent to the limitations of Claim 16 and are therefore rejected under the same basis.

o. **Per claim 17**, *Sampath et al* and *Hockey et al* with *Smith et al* teach a communications terminal apparatus as defined in claim 15, *Sampath et al* further teach wherein said terminal identification information includes at least one of an E-mail address, a serial number, facsimile TTI information, and a telephone number of said apparatus (*col.1 line 61-col.2 line 58, col.3 line 53-col.4 line 10, and col.7 line 50-col.8 line 51*).

p. **Claim 25** contains limitations substantially equivalent to the limitations of Claim 17 and is therefore rejected under the same basis.

q. **Per claim 40**, *Sampath et al* and *Hockey et al* with *Smith et al* teach a method as in claim 39 including receiving at the unit, *Sampath et al* further teach in response to said transmitting of said first notification, a first communication from at least one of said manager and said at least one external facility and displaying a selected representation of said response at the unit (*col.2 lines 54-58, col.7 lines 36-67 and col.8 lines 1-20; Smith et al—col.5 lines 5-54*).

r. **Per claim 41**, *Sampath et al* and *Hockey et al* with *Smith et al* teach a method as in claim 40, *Sampath et al* further teach in which said communication is from said at least one external facility and advise when the request is expected to be met (*col.1 lines 52-67 and col.2 lines 54-67*).

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s. **Per claim 45**, *Sampath et al* and *Hockey et al* with *Smith et al* teach a method as in claim 39 *Sampath et al* further teach the method in which said first event is indicative of a requirement to service a heater in said unit (*col.3 line 53-col.4 line 26*).

t. **Per claim 50**, *Sampath et al* and *Hockey et al* with *Smith et al* teach the communications terminal apparatus of Claim 1, *Hockey et al* further teach wherein said detector detects a remaining amount of consumable product in said apparatus, and sends to said controller a signal including detection information corresponding to the remaining amount of said consumable product detected by said detector (*col.6 lines 21-65*).

u. **Per claim 51**, *Sampath et al* and *Hockey et al* with *Smith et al* teach the communications terminal apparatus of Claim 5, *Sampath et al* further teach wherein said controller sends said request to both said manager and said service depot and sends a request for refilling a consumable product in said communications terminal apparatus only to said manager, when said communications terminal apparatus is in need of refilling of said consumable product (*col.5 lines 1-4, col.8 lines 1-25 and 35-51, col.11 lines 2-13 and 38-46; Smith et al—col.15 lines 5-54*).

v. **Claim 52** contains limitations substantially equivalent to the limitations of Claim 51 and is therefore rejected under the same basis.

Conclusion

V. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Chapman et al (6522421), Okada et al (6088125), Frantz (6003070), Danknick et al

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(5901286), Takada et al (5666294), Aikens et al (5414494), Motoyama et al (6613247), Villalpando (6219718), Iizuka (6029198).

VI. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristie D. Shingles whose telephone number is 571-272-3888.

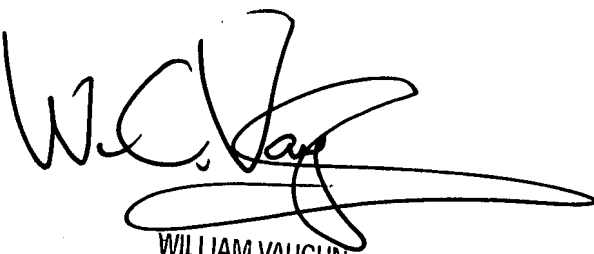
The examiner can normally be reached on Monday 8:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on 571-272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kristie D Shingles
Examiner
Art Unit 2141

kds


WILLIAM VAUGHN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100